

Senate Committee On NATURAL RESOURCES

Alfred "Al" Lawson, Jr., Chair Paula Dockery, Vice Chair

Meeting Packet

Monday, April 19, 2004 11:30 a.m. – 1:30 p.m. 37 SOB

(Please bring this packet to the committee meeting. Duplicate materials will not be available.)

EXPANDED AGENDA

COMMITTEE ON NATURAL RESOURCES

Senator Lawson, CHAIR Senator Dockery, VICE-CHAIR

DATE: Monday, April 19, 2004 TIME: 11:30 a.m. -- 1:30 p.m.

PLACE: Room 37 (LL), Senate Office Building

(MEMBERS: Senators Argenziano, Atwater, Constantine, Cowin and Siplin)

TAB	BILL NO. AND INTRODUCER	BILL DESCRIPTION AND SENATE COMMITTEE ACTIONS	COMMITTEE ACTION	
1	SB 0540 Bennett (Linked S 0542)	Manatee Protection; requires Fish & Wildlife Conservation Comm. to implement manatee population research study; provides legislative intent re subject areas of said research; provides program goals for said research re policy decisions based on sound scientific data; requires that certain issues be studied in manatee population research program; directs commission to contract with Mote Marine Laboratory to conduct research study, etc. Amends 370.1201.		
		NR 04/12/04 Temporarily postponed NR 04/19/04 AGG AP		
2	SB 1510 Lawson	Water Management Districts; eliminates obsolete requirement for report by districts. Amends 373.199. NR 04/19/04		
3	SB 1518 Lawson	Beaches & Shores Division/DEP; removes obsolete reference to Beaches & Shores Division of DEP. Amends 403.8163. NR 04/19/04		

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL:	SB 540			
SPONSOR:	Senator Benne	tt		
SUBJECT:	Manatee Prote	ction		
DATE:	April 2, 2004	REVISED:		
1. Molloy MM 2. 3. 4. 5. 6.	LYST	STAFF DIRECTOR Kige	REFERENCE NR AGG AP	ACTION

I. Summary:

This bill directs the Fish & Wildlife Conservation Commission (FWC) to implement and administer an ongoing manatee population research study that is designed to increase knowledge of factors that determine the size and distribution of the manatee populations in the waters of the state. The study is to be used to develop policies that ensure that manatee populations receive the maximum protection possible while allowing optimum recreational use of the state's waterways.

This bill requires that the research study address particular issues such as the size, quality, and health of sea grass beds that sustain manatee populations, and requires that the FWC contract with Mote Marine Laboratory to conduct the manatee population research study.

The bill appropriates \$1.5 million from the Marine Fuel Tax¹ and \$1.5 million from the Save the Manatee Trust Fund to the FWC for the purposes of implementing the act.

This bill substantially amends s. 370.1201, Florida Statutes.

II. Present Situation:

Florida Manatee (West Indian Manatee species): Trichechus manatus latirostris² Manatees in Florida are members of the West Indian manatee species, and can be found throughout our rivers, estuaries, and bays. Manatees are warm-blooded and seek refuge from

¹ The 2003 Legislature enacted ch. 2003-156, Laws of Florida, to transfer fuel tax collected at marinas (commonly called "marina fuel tax") from the Fuel Tax Collection Trust Fund to the Marine Resources Conservation Trust Fund within the FWCC

² "Manatees, Florida's Gentle Giants", Sea Stats, June-2001, Florida Marine Research Institute, FWC

cold temperatures in natural springs such as Blue Springs on the St. Johns River, and the springs that form the Homosassa and Crystal Rivers on Florida's west coast. Manatees also congregate in man-made sources of warm water such as power plants and other industrial facilities with thermal plumes. The water temperature danger level for manatees is about 55° F.

Manatees breath air and surface about every four minutes although they are capable of remaining submerged for up to 20 minutes. Manatees average 10 feet in length, about 1200 pounds in weight, and weigh approximately 66 pounds at birth. Two front flippers help manatees gather as much as 200 pounds of sea grass and other aquatic plants per day. Manatees have a wide, paddle-shaped tail, small eyes that can distinguish colors, shapes, and patterns, and ear openings that allow them to hear at low frequencies.

Sea Grasses

Sea grasses are flowering plants that live underwater but produce oxygen. The depth at which sea grasses are found is limited by water clarity because they require light. Sea grasses can be found throughout the coastal areas of the state, but are most abundant from Tarpon Springs northward to Apalachee Bay. Florida has an estimated 502,000 acres of sea grasses that among other things, serve as a primary food source for manatees and serve as nursery areas for many forms of marine life such as shrimp and crabs. Manatees will eat sea grass beds (each adult manatee eats about 100 pounds of sea grass per day) down to the sand and will quickly move off to another feeding area. Sea grass beds damaged by boat hulls and propellers take many years to recover, but sea grass beds used by manatees as a forage area recover very quickly.

Warm Water Refuges

Manatees in Florida are at the northernmost reaches of their range. During the warm season, manatees range throughout the Florida peninsula, and travel west to Texas and north of the southeastern coastal states. Manatees prefer water temperatures above 68° F, and water temperatures below that range can cause loss of body heat and poor digestion which lead to "cold stress" or death.⁵

During the winter months, water temperatures can fall below the thermal minimum. As a result, manatees seek warm water sources to meet their thermal needs. These can be natural sources such as springs, but in Florida, large numbers of manatees congregate at the artificial warm water areas created by power plant outfalls. Research conducted by the FWC indicates that manatees return to the same site year after year, and that manatees travel from one power plant to another during the winter.

According to the FWC, "the presence of power plants have permitted manatees to spend the winter in areas like Brevard County and Tampa Bay, which are considered to be north of their historical range. Manatees that winter this far north are much more reliant on these refugia for survival than those manatees using a power plant in south Florida." Areas of concern regarding

³ www.dep.state.fl.us/coastal/habitats/seagrasses.htm

⁴ "Manatee Life", Columbus Zoo & Aquarium, www.colszoo.org/animalareas/shores/manatee_coast/manateeLife/life-eating.html

⁵ Why are Warm Water Refuges Important to Manatees?,

http//floridaconservation.org/psm/habitat/importancewarmwater.htm

⁶ Summary of Artificial Warm Water Refugia Issues, http://floridaconservation.org/psm/habitat/warmwat.htm, pgs. 1-2

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the creation and continued use of artificial warm water refugia include what happens to manatees when power plants fail or are closed, and water quality and vegetation affected by water contaminants associated with industrial discharges.

Florida has 8 primary and 4 secondary industrial warm water manatee refuges. Florida Power & Light operates 5 of the primary sites while Progress Energy of Florida, the Tampa Electric Company (TECO) and Reliant Energy operate the other 3 primary sites. Secondary sites are operated by Progress Energy, the City of Vero Beach, the Ft. Pierce Utilities Authority, and TECO.⁷

Power Plant Manatee Protection Plans

In 1995, the Florida Department of Environmental Protection (DEP) was authorized by the federal Environmental Protection Agency (EPA) to assume the permitting duties for the federal National Pollutant Discharge Elimination System (NPDES), which includes permitting of power plants which pump cool water through the facility and discharge warm water back into the water. As part of the permitting process, the United States Fish and Wildlife Service (USFWS) and the Bureau of Protected Species Management (BPSM) at the FWC determine if the power plant provides a critical manatee habitat. If it is determined that the power plant does or will provide a critical manatee habitat, the power plant must develop a manatee protection plan that is incorporated into the NPDES permit. Protection plan components include how the plant will monitor the water temperature in the discharge canals, how the plant intends to maintain a steady water temperature, and notification to the appropriate agency when manatees appear to be in distress within the discharge area.

NPDES permits are issued for no more than 5 years. Each time a permit is up for renewal, the USFWS and the BPSM review the power plant's manatee protection plan to determine if the plan is sufficient or if it needs revision.⁸

Florida Marine Research Institute (FMRI)⁹

The FMRI, transferred from the DEP to the FWC in 1999, is the state's technical point for conducting applied marine research and ensuring the scientific needs of the FWC's marine resource managers are met. The FMRI has more than 130 research projects covering more than 150 key marine resources including commercial and recreational fisheries, endangered and threatened marine species, and harmful algal blooms such as red-tide. Funding sources include the Marine Resources Conservation Trust Fund and the Save the Manatee Trust Fund.

The Endangered & Threatened Species Section of the FMRI is responsible for aerial surveys that monitor manatee populations, abundance and distribution; carcass recovery and necropsy to determine age, life history, and causes of death; manatee rescue and rehabilitation; manatee ecology and migration studies, and implementing studies that help characterize the human impacts to manatees, primarily those relating to compliance with boating laws, and boater demography. Program partners include Mote Marine Laboratory, the University of Florida's

⁷ Industrial Warm-Water Manatee Refuges Map created by the FWC Bureau of Protected Species Management, April 2004.

⁸ Information provided by staff of the Industrial Wastewater Program at the DEP.

College of Veterinary Medicine, the USFWS, and the United States Geological Survey Sirenia Project.

Warm Water Task Force

The Warm Water Task Force (task force) is a component of the Habitat Working Group developed as recommended in the USFWS "Florida Manatee Recovery Plan." The task force, which first met in September 2000, consists of the USFWS, the FWC, the USGS, the DEP, Save the Manatee Club, several energy companies, Southwest Florida Marine Industries, the federal Marine Mammal Commission, and the Wildlife Trust Association.

The specific goals of the task force include developing and implementing strategies to ensure safe and dependable warm-water refuges for manatees. Development of conceptual plans for a long-term network of warm water refuges, and developing plans to reduce the potential loss of manatees when power plants do go off-line are some the actions being taken by the task force.¹⁰

Save the Manatee Trust Fund

The Save the Manatee Trust Fund was created in the former Department of Natural Resources in 1989 to serve as the repository for 100 percent of the proceeds from the sale of the Save the Manatee License plate. In the years since its creation, more than 525,000 license plates have been sold generating over \$31 million in revenue. However, revenue generated from the sale of the specialty license plate has decreased from \$2.8 million in 1993 to \$1.7 million in 2003. The trust fund also receives \$1 from the fee paid by each vessel required to be registered in the state.

In fiscal year 2002-2003, the Save the Manatee Trust Fund received \$3.7 million in revenues, and distributed \$1.2 million to the BPSM at the FWC for education and information, signage, rule development, manatee protection plans, habitat protection and planning and permitting. The FMRI received \$1.7 million for manatee program research expenses, and the FWC's Division of Law Enforcement received \$372,875. Mote Marine Laboratory received \$325,000 for research conducted in partnership with the FMRI. The FWC's Advisory Council for Environmental Education received \$133,000 for manatee-related environmental education grants to the Charlotte Harbor Environmental Center to conduct manatee education for third-grade classes in Lee and Charlotte counties, to the Environmental Studies Center for first-grade manatee education in Martin County, and to Mote Marine in partnership with Booker High School in Sarasota County. ¹²

III. Effect of Proposed Changes:

Section 1. Amends s. 370.1201, F.S., to provide that the FWC shall implement and administer an ongoing manatee population research study designed to increase knowledge of the factors that determine the size and distribution of the manatee populations in state waters, and to use that knowledge to develop policies that provide maximum manatee protection while allowing optimal recreational use of the state's waterways. Establishes the Legislature's intent that the research

¹⁰ Information provided by Bureau of Protected Species Management at the FWC.

¹¹ http://www.hsmv.state.fl.us/specialtytags/Manatee.html

¹² Save the Manatee Trust Fund Annual Report 2002-2003, FWC, pg. 5

program address areas of manatee-habitat information that have not been adequately covered in other research programs or short-term studies.

Provides that the goal of the research program is to enable research managers, state and local policymakers, and the public to undertake sustained efforts to develop sound scientific policy to protect manatees while also permitting maximum use of the state's waterways without endangering the manatee population. Provides that the population research study must:

- Conduct an annual census of the manatee population that identifies the number of manatees in state waters and assesses the manatee mortality pattern in state waters,
- Describe the size and quality of manatee's environmental habitat and assess the environmental and other conditions affecting the habitat,
- Survey the size and condition of the state's sea grass beds and determine the ideal manatee population that the sea grass beds can support as a food source, including how fast sea grass beds are being consumed and the effects of consumption on sea grass beds,
- Project the size of the future manatee population and how that population will affect the health of sea grass beds,
- Assess the manatee population congregating at warm water discharge portals at power plants and the risk of potential diseases caused by increased congregation at these sites,
- Assess the health and reproductive capacity of manatees, including current and future factors affecting manatee health and reproduction,
- Develop research, monitoring, and implantation priorities for manatee habitat including stabilization, maintenance, and propagation of sea grass beds,
- Study boat traffic patterns in state waters and evaluate boater compliance with existing laws and regulations designed to protect manatees, and
- Develop recommendations that can be implemented by state and local governments to improve manatee habitat, develop manatee protection zones, and maximize the size of safe boating areas for recreational use.

Requires that the FWC contract with Mote Marine Laboratory to conduct the manatee research population study. Requires Mote Marine Laboratory to submit an annual report to the Governor, the Legislature, and the FWC by February 1 of each year to detail the progress of the research study. The annual report must include, when appropriate, recommendations for developing state and local policies to increase the manatee population and improve boating opportunities.

Provides that the FWC must ensure that funds allocated under this act are expended in a manner consistent with the requirements of the act. Allows the FWC to require an annual audit of the expenditures and provide a report to the Legislature by March 1 of each year. Provides that the population research study shall be funded from moneys deposited into the Manatee Population Study Trust Fund.

Section 2. Appropriates \$1.5 million from the Marine Fuel Tax and \$1.5 million from the Save the Manatee Trust Fund to the FWC for fiscal year 2004-2005 to implement the purposes of the act.

Section 3. Provides that the act shall effect on July 1, 2004.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

This bill provides that the population research study will be funded from moneys deposited into the Manatee Population Study Trust Fund. This trust fund does not exist but is the subject of SB 542, which must pass the Legislature by a three-fifths vote of the membership in each House.

D. Other Constitutional Issues:

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

VI. Technical Deficiencies:

This bill provides that the manatee population research study will be funded from revenues deposited into the Manatee Population Study Trust Fund. However, the bill provides that funds from the Save the Manatee Trust Fund and the Marine Fuel Tax are appropriated to the FWC, not deposited into the Manatee Population Study Trust Fund. In addition, there is no Marine Fuel Tax as referenced in this bill (see FN1). The bill should appropriate \$1.5 million from the Save the Manatee Trust Fund and \$1.5 million from fuel taxes transferred into the Marine Resources Conservation Trust Fund to the Manatee Population Study Trust Fund.

VII. Related Issues:

None.

VIII. Amendments:

The bill sponsor is expected to offer a "strike-everything" amendment to the bill that contains provisions of this bill, corrects technical deficiencies, and incorporates provisions of:

- SB 342 by Senator Bennett to create an exception from prohibited manatee-related activities,
- SB 1676 by Senator Bennett relating to a presumption of adequacy for rules in areas where manatee-related measurable biological goals are being achieved, and
- SB 1722 by Senator Posey relating to a study of the effectiveness of warning signs in manatee slow-speed zones.

The "strike amendment" will be the substance of a Proposed Committee Substitute by the Natural Resources Committee and Senators Bennett and Posey.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL:	PCS/SB 540			
SPONSOR:	Natural Resour	ces Committee and Senat	ors Bennett and Posey	
SUBJECT:	Manatee Protect	ction		
DATE:	April 6, 2004	REVISED:		
1. Molloy W 2. 3. 4. 5. 6.	ALYST	STAPE/DIRECTOR Kigen	REFERENCE NR AGG AP	ACTION

I. Summary:

The proposed committee substitute (PCS) conforms state law to federal law by creating an exception for any activity that is otherwise prohibited by the "Florida Manatee Sanctuary Act" if the activity is reasonably necessary to prevent the loss of life or property, or if the activity is necessary to render necessary assistance to persons or property. The PCS provides that in regions where measurable biological goals for manatees are being achieved, a presumption exists that existing manatee protection rules are adequate and additional rules are unnecessary.

The PCS directs the Fish & Wildlife Conservation Commission (FWC) to contract with Mote Marine Laboratory to conduct a "Manatee Habitat and Submerged Aquatic Vegetation Assessment" at warm water discharge sites at power plants, and establishes requirements for the assessment. Mote Marine Laboratory is required to submit an interim report that details the progress of the assessment to the FWC, the Legislature and the Governor by September 1, 2006, and a final report containing recommendations to protect manatee habitat in warm water discharge sites by January 1, 2007.

The PCS establishes the Legislature's intent that the FWC conduct a "Signage and Boat Speed Assessment" to determine the effectiveness of manatee protection signs and sign placement, and assess boat speed, and establish requirements for the assessment. The "Signage and Boat Speed Assessment" must be completed by January 1, 2007, and a findings report must be submitted to the Governor and the Legislature by February 1, 2007.

The PCS authorizes the FWC to develop and implement the use of genetic tagging to improve its ability to assess the status and health of the manatee population.

The PCS appropriates \$325,000 for fiscal year 2004-2005 from the Save the Manatee Trust Fund to the FWC for the purpose of contracting with Mote Marine Laboratory to conduct the "Manatee Habitat and Submerged Aquatic Vegetation Assessment." Beginning in fiscal year 2004-2005, the sum of \$325,000 is appropriated from the Marine Resources Conservation Trust Fund to the FWC for the purposes of implementing the Signage and Boat Speed Assessment. \(^1\)

The PCS substantially amends ss. 370.12 and 372.072, Florida Statutes, and creates s. 370.1202, Florida Statutes.

II. Present Situation:

Florida Manatee (West Indian Manatee species): Trichechus manatus latirostris² Manatees in Florida are members of the West Indian manatee species, and can be found throughout our rivers, estuaries, and bays. Manatees are warm-blooded and seek refuge from cold temperatures in natural springs such as Blue Springs on the St. Johns River, and the springs

cold temperatures in natural springs such as Blue Springs on the St. Johns River, and the springs that form the Homosassa and Crystal Rivers on Florida's west coast. Manatees also congregate in man-made sources of warm water such as power plants and other industrial facilities with thermal plumes. The water temperature danger level for manatees is about 55° F.

Manatees breath air and surface about every four minutes although they are capable of remaining submerged for up to 20 minutes. Manatees average 10 feet in length, about 1200 pounds in weight, and weigh approximately 66 pounds at birth. Two front flippers help manatees gather as much as 200 pounds of sea grass and other aquatic plants per day. Manatees have a wide, paddle-shaped tail, small eyes that can distinguish colors, shapes, and patterns, and ear openings that allow them to hear at low frequencies.

Florida's first manatee protection law was enacted in 1893 and restricted manatee hunting. Additional protections include the federal Marine Mammal Protection Act of 1972 which prohibited the hunting of marine mammals, the federal Endangered Species Act of 1973 which declared manatees an endangered species, and the Florida Manatee Sanctuary Act of 1978 which authorized the state to establish and enforce boating restrictions to protect manatee habitat.

Aerial surveys conducted by the FWC show that manatee populations have increased in recent years. In February 1991, the aerial count was 1,462. In January 1997, the aerial count was 2,229. In March 1999, the aerial count was 2,353; in January 2002, 3,276 manatees were counted; and in January 2003, 3,113 manatees were counted. The aerial survey conducted by the FWC in February of 2004 counted 2,568 manatees but this lower count is attributed to warmer weather which resulted in a smaller congregation of manatees at warm water discharge sites.

Marine Mammal Protection Act of 1972 (Federal)

The Marine Mammal Protection Act (MMPA), enacted in 1972 and reauthorized in 1994, designates manatees as a marine mammal in danger of extinction or depletion due to human activities. The primary purpose of the Act is to prohibit the taking of marine mammals except

¹ The 2003 Legislature enacted ch. 2003-156, Laws of Florida, to transfer fuel tax collected at marinas (commonly called "marina fuel tax") from the Fuel Tax Collection Trust Fund to the Marine Resources Conservation Trust Fund within the FWCC.

² "Manatees, Florida's Gentle Giants", <u>Sea Stats</u>, June-2001, Florida Marine Research Institute, FWC

under certain conditions such as conducting scientific research or enhancing the recovery or survival of a species. Portions of the Act authorize the "incidental taking" of marine mammals but only upon the condition that such a taking will have a negligible impact upon the species. This "incidental taking" by industries such as development or commercial fishing cannot be intentional.

In circumstances where persons possessing "incidental take" permits are found to have violated the "incidental take" permit, or failed to comply with provisions of the MMPA, the Secretary of the Interior is authorized to withdraw or suspend "incidental take" permits, thereby effectively stopping construction of marinas, docks, boating facilities, or any other structure, including single-family homes, where destruction of manatee habitat may result in an "incidental take" of the species.

Endangered Species Act of 1973 (Federal)

The Endangered Species Act (ESA), enacted in 1973 and amended in 1996, designates that species of fish (including marine mammals), wildlife and plants which are so depleted they are in danger of or threatened with extinction must be conserved. Section 9 of the Act provides that it is illegal for persons to "take" any species, or violate any regulation protecting any species that are designated as threatened or endangered. Section 10 of the Act provides for "incidental take" permits in the same manner as the MMPA, and Section 17 of the ESA provides that no provision of the Act, may take precedence over provisions of the MMPA.

Florida Manatee Sanctuary Act - s. 370.12 (2), Florida Statutes (Ch. 78-252, L.O.F.)

The Florida Manatee Sanctuary Act (Act) was adopted in 1978 and is designed to protect the manatee from injury or harm due to the operation and speed of motorboats in the areas specified within the Act. The Act declared that the entire State was a refuge and sanctuary for manatees, and provided that in order to protect manatees from harmful collisions with boats, the former Department of Natural Resources (DNR) was to initiate rules under ch. 120, F.S., to establish seasonal speed zones within Brevard, Broward, Citrus, Hillsborough, Indian River, Lee, Palm Beach, St. Lucie and Volusia counties. Areas affected by the rules included springs, rivers, and power plant discharge areas. The DNR was directed to adopt rules regulating the operation and speed of motorboat traffic for any new power plant, or other new source of warm water discharge, whenever a concentration of manatees were attracted to the area. Responsibility for law enforcement was shared with the former Game & Fresh Water Fish Commission (now the FWC).

In 1982, the Legislature amended the Act to provide for seasonal speed zones in Sarasota, Collier and Martin counties, and added language stating that the Legislature did not intend DNR to generally regulate boat speeds within the areas thereby interfering with recreational or commercial waterway users. In 1983, the Act was amended to remove requirements for seasonal speed zones and allow the DNR to regulate the operation and speed of motorboats on a year-around basis. Additional areas in Manatee and Dade counties were identified, further provisions for Brevard County were added, and the DNR was authorized to adopt manatee protection rules in all areas of the state where manatees were frequently sighted.³

³ see ch. 83-81, L.O.F.

The last major amendment to the Act occurred in 2002, when the Legislature enacted ch. 2002-264, L.O.F., to provide for increased public access to the FWC's rule development process by requiring that counties create local rule review committees to review and make recommendations on rules that propose to regulate the operation and speed of motorboats for purposes of manatee protection. The FWC was required to work with the USFWS to establish a measurable biological goal to define manatee recovery and the FWC was required to conduct boater compliance studies. Counties that should have already submitted a manatee protection plan as required in the 1989 Policy Directive were required to do so by July 1, 2004. All manatee protection plans for counties identified by the FWC as counties of substantial risk for manatee mortality must be completed by July 1, 2006.

Although the number of manatee deaths from water-related incidents such as collisions with boats or other watercraft continues to be of concern, the 2003 mortality rate for manatee deaths (73) as a result of water-related incidents was the lowest since 1998 and a 23 percent reduction over the 2002 total when 95 manatees were killed due to watercraft.

Manatee Protection Plans

In June of 1989, the Governor and the Cabinet directed the DNR (now the Department of Environmental Protection or DEP) to develop recommendations for specific actions to protect manatees, and to make the state's waters safe for boaters. These recommendations were presented to the Governor and the Cabinet in October 1989, and were contained in a report entitled *Recommendations to Improve Boating Safety and Manatee Protection for Florida Waterways*. The report recommended the following actions with relation to manatee protection:

- Establish shoreline slow speed zones.
- Create new manatee protection zones.
- Designate manatee preserves.
- Improve speed zone sign posting.
- Institute an Interim Boating Facility Expansion Policy
- Amend the Florida Manatee Sanctuary Act (s. 370.12 (2), F.S.).
- Education and Information Campaign.

The report recommended that in thirteen key counties (Brevard, Broward, Citrus, Collier, Dade, Duval, Indian River, Lee, Martin, Palm Beach, St. Lucie, Sarasota and Volusia) shoreline slow speed zones should be established for all inland waters accessible to manatees. The counties would be responsible for posting manatee information signs and speed zone signs at key access points such as marinas, boat ramps, and waterfront parks. The report suggested that county governments develop site-specific manatee protection regulations and recommended a schedule for development of those regulations. To provide an incentive, the report suggested that boundaries for shoreline slow speed zones should be increased if manatee regulations were not in place by the recommended deadline.

The report suggested that the construction of new or expanded boating facilities within the thirteen counties would be limited to a maximum of one powerboat slip per hundred linear feet of shoreline owned or controlled by the permit applicant unless a county had developed and implemented a manatee protection plan approved by the DNR, and a boating facility siting policy applicable to facilities with more than five boat slips or expanding to more than five boat

slips. Approval of a local ordinance was to be based on a determination that the ordinance did not permit dock densities harmful to manatees, did not allow destruction of essential habitat, and did not allow dock construction in areas used by manatees. Manatee protection plans were to be based on comprehensive manatee mortality, abundance, and distribution data, and interim plans could be developed using the best available information as approved by the DNR.⁴

The Governor and the Cabinet adopted the recommendations contained in the report, and the requirement for counties to adopt and implement a manatee protection plan was put in place through the permitting process. The responsibilities for manatee protection were statutorily transferred to the FWC in 1999. To date, the FWC has approved manatee protection plans for Brevard, Citrus, Collier, Dade, Duval, Indian River, Martin, and St. Lucie counties. Partial plans have been approved for Broward and Volusia counties. No plan has been approved for Palm Beach County, draft elements of the Lee County plan have been approved, the Sarasota County plan is under contract with the FWC.⁵

Emergency Assistance - Prohibited Activities

Subpart J of Title 50, Code of Federal Regulations, Part 17 relates to Manatee Protection Areas. Section 17.105 provides for an exception to activities prohibited by the ESA for persons engaged in activities otherwise prohibited if the activity is reasonably necessary to prevent loss of life or property due to weather conditions or other reasonably unforeseen circumstances, or to render necessary assistance to persons or property. The Florida Manatee Sanctuary Act does not contain a similar exception.

Measurable Biological Goals

In the "Florida Manatee Recovery Plan, 3rd Revision", the USFWS established population related benchmarks for certain aspects of manatee demographics to help determine the success of manatee conservation. The benchmarks were derived from the "Manatee Population Status Working Group's Recommendation of Population Benchmarks to Help Measure Recovery" which were based on published estimates of survival, reproduction, and population growth rate. The current benchmarks established by the USFWS are:

- a. statistical confidence that the average annual rate of adult manatee survival is 90 percent or greater;
- b. statistical confidence that the average annual percentage of adult female manatees accompanied by first or second year calves in winter is 40 percent or greater; and
- c. statistical confidence that the average annual rate of population growth is equal to or greater than zero.

The population benchmarks should be achieved within a 95 percent level of statistical confidence in each of the four regions for a 10-year period of time before the manatee can be reclassified to threatened status at the federal level.

⁴ "Recommendations to Improve Boating Safety and Manatee Protection for Florida Waterways", Final Report to the Governor and Cabinet, October 24, 1989, Florida Department of Natural Resources.

⁵ "Status of Developing Manatee Protection Plans", Bureau of Protected Species Management, FWC, http://floridaconservation.org/psm/manatee/mpp.htm

In January 2003, the FWC adopted the population benchmarks as the "measurable biological goals" required by s. 370.12 (2), F.S., to be used to define manatee recovery and to be used in the development of management plans and in evaluating the progress of species recovery. However, the FWC required that the measurable biological goals be reviewed within one year from adoption.

Sea Grasses

Sea grasses are flowering plants that live underwater but produce oxygen. The depth at which sea grasses are found is limited by water clarity because they require light. Sea grasses can be found throughout the coastal areas of the state, but are most abundant from Tarpon Springs northward to Apalachee Bay. Florida has an estimated 502,000 acres of sea grasses that among other things, serve as a primary food source for manatees and serve as nursery areas for many forms of marine life such as shrimp and crabs. Manatees will eat sea grass beds (each adult manatee eats about 100 pounds of sea grass per day) down to the sand and will quickly move off to another feeding area. Sea grass beds damaged by boat hulls and propellers take many years to recover, but sea grass beds used by manatees as a forage area recover very quickly.

Warm Water Refuges

Manatees in Florida are at the northernmost reaches of their range. During the warm season, manatees range throughout the Florida peninsula, and travel west to Texas and north of the southeastern coastal states. Manatees prefer water temperatures above 68° F, and water temperatures below that range can cause loss of body heat and poor digestion which lead to "cold stress" or death.⁸

During the winter months, water temperatures can fall below the thermal minimum. As a result, manatees seek warm water sources to meet their thermal needs. These can be natural sources such as springs, but in Florida, large numbers of manatees congregate at the artificial warm water areas created by power plant outfalls. Research conducted by the FWC indicates that manatees return to the same site year after year, and that manatees travel from one power plant to another during the winter.

According to the FWC, "the presence of power plants have permitted manatees to spend the winter in areas like Brevard County and Tampa Bay, which are considered to be north of their historical range. Manatees that winter this far north are much more reliant on these refugia for survival than those manatees using a power plant in south Florida." Areas of concern regarding the creation and continued use of artificial warm water refugia include what happens to manatees when power plants fail or are closed, and water quality and vegetation affected by water contaminants associated with industrial discharges.

6 www.dep.state.fl.us/coastal/habitats/seagrasses.htm

http//floridaconservation.org/psm/habitat/importancewarmwater.htm

⁷ "Manatee Life", Columbus Zoo & Aquarium, www.colszoo.org/animalareas/shores/manatee_coast/manateeLife/life-eating.html

⁸ Why are Warm Water Refuges Important to Manatees?,

⁹ Summary of Artificial Warm Water Refugia Issues, http://floridaconservation.org/psm/habitat/warmwat.htm, pgs. 1-2

Florida has 8 primary and 4 secondary industrial warm water manatee refuges. Florida Power & Light operates 5 of the primary sites while Progress Energy of Florida, the Tampa Electric Company (TECO) and Reliant Energy operate the other 3 primary sites. Secondary sites are operated by Progress Energy, the City of Vero Beach, the Ft. Pierce Utilities Authority, and TECO.¹⁰

Power Plant Manatee Protection Plans

In 1995, the DEP was authorized by the federal Environmental Protection Agency (EPA) to assume the permitting duties for the federal National Pollutant Discharge Elimination System (NPDES), which includes permitting of power plants which pump cool water through the facility and discharge warm water back into the water. As part of the permitting process, the United States Fish and Wildlife Service (USFWS) and the Bureau of Protected Species Management (BPSM) at the FWC determine if the power plant provides a critical manatee habitat. If it is determined that the power plant does or will provide a critical manatee habitat, the power plant must develop a manatee protection plan that is incorporated into the NPDES permit. Protection plan components include how the plant will monitor the water temperature in the discharge canals, how the plant intends to maintain a steady water temperature, and notification to the appropriate agency when manatees appear to be in distress within the discharge area.

NPDES permits are issued for no more than 5 years. Each time a permit is up for renewal, the USFWS and the BPSM review the power plant's manatee protection plan to determine if the plan is sufficient or if it needs revision.¹¹

Florida Marine Research Institute (FMRI)¹²

The FMRI, transferred from the DEP to the FWC in 1999, is the state's technical point for conducting applied marine research and ensuring the scientific needs of the FWC's marine resource managers are met. The FMRI has more than 130 research projects covering more than 150 key marine resources including commercial and recreational fisheries, endangered and threatened marine species, and harmful algal blooms such as red-tide. Funding sources include the Marine Resources Conservation Trust Fund and the Save the Manatee Trust Fund.

The Endangered & Threatened Species Section of the FMRI is responsible for aerial surveys that monitor manatee populations, abundance and distribution; carcass recovery and necropsy to determine age, life history, and causes of death; manatee rescue and rehabilitation; manatee ecology and migration studies, and implementing studies that help characterize the human impacts to manatees, primarily those relating to compliance with boating laws, and boater demography. Program partners include Mote Marine Laboratory, the University of Florida's College of Veterinary Medicine, the USFWS, and the United States Geological Survey Sirenia Project.

Warm Water Task Force

The Warm Water Task Force (task force) is a component of the Habitat Working Group developed as recommended in the USFWS' "Florida Manatee Recovery Plan." The task force,

¹⁰ Industrial Warm-Water Manatee Refuges Map created by the FWC Bureau of Protected Species Management, April 2004.

¹¹ Information provided by staff of the Industrial Wastewater Program at the DEP.

¹² Programs of the Florida Marine Research Institute 2002-2003, FWC, pgs. 34-37

which first met in September 2000, consists of the USFWS, the FWC, the USGS, the DEP, Save the Manatee Club, several energy companies, Southwest Florida Marine Industries, the federal Marine Mammal Commission, and the Wildlife Trust Association.

The specific goals of the task force include developing and implementing strategies to ensure safe and dependable warm-water refuges for manatees. Development of conceptual plans for a long-term network of warm water refuges, and developing plans to reduce the potential loss of manatees when power plants do go off-line are some the actions being taken by the task force. 13

Mote Marine Laboratory

The Mote Marine Laboratory located in Sarasota, Florida is more than 40 years old, and is an independent, nonprofit research organization that focuses on marine science. Of the \$9.4 million Mote Marine received in research funding in 2002, almost 23 percent came from the state, 27 percent was federal funds, and the balance came from other sources. Mote Marine participates in cooperative ventures with many partners, one of whom is the FWC.

Mote Marine has been involved in manatee research and conservation activities since 1985. The Center for Marine Mammal and Sea Turtle Research at Mote Marine runs the Manatee Research Program. Projects include aerial surveys to document habitat use patterns and seasonal distribution, photographic identification using scars from boat strikes to identify individual manatees, telemetry research involving manatee tagging to follow movements and identify habits, and waterways management research to assess compliance with regulatory zones and the overall effectiveness of enforcement activities. 14 Mote Marine also studies the effects of red tide on manatees.

Signage

Manatee protection zones are marked by 3' x 4' or 5' x 7' signs that have an orange circle in the center and an orange border in addition to the regulatory information. The rule number is shown on the lower right-hand corner and the permit number is show in the lower left-hand corner. No specific numerical speed is assigned to an Idle Speed (minimum speed that will maintain steerage) or Slow Speed (speed at which vessel proceeds when it is fully off plane and fully settled in the water) signs.

The FWC has two types of approved permanent manatee signs that may be required by permit or lease: educational signs which are non-regulatory in nature, and awareness signs. Sign site plans must be approved by the BPSM at the FWC. Applicants must be notified within 30 days after receipt of the sign placement proposal only if the signs and locations are unacceptable. Any applicant who has not received a response from the FWC within the 30-day period can assume that the sign site plan is approved. 15

Save the Manatee Trust Fund

The Save the Manatee Trust Fund was created in the DNR in 1989 to serve as the repository for 100 percent of the proceeds from the sale of the Save the Manatee License plate. In the years

¹³ Information provided by Bureau of Protected Species Management at the FWC.

¹⁴ Mote Marine Laboratory, Research Projects, http://www.mote.org/research/cmmstr/mer/tempage2.htm

^{15 &}quot;Regulatory Sign Posting on Manatee Protection Zones", FWC, http://floridaconservation.org/psm/signs/signsreg.htm

since its creation, more than 525,000 license plates have been sold generating over \$31 million in revenue. However, revenue generated from the sale of the specialty license plate has decreased from \$2.8 million in 1993 to \$1.7 million in 2003. The trust fund also receives \$1 from the fee paid by each vessel required to be registered in the state.

In fiscal year 2002-2003, the Save the Manatee Trust Fund received \$3.7 million in revenues, and distributed \$1.2 million to the BPSM at the FWC for education and information, signage, rule development, manatee protection plans, habitat protection and planning and permitting. The FMRI received \$1.7 million for manatee program research expenses, and the FWC's Division of Law Enforcement received \$372,875. Mote Marine Laboratory received \$325,000 for research conducted in partnership with the FMRI. The FWC's Advisory Council for Environmental Education received \$133,000 for manatee-related environmental education grants to the Charlotte Harbor Environmental Center to conduct manatee education for third-grade classes in Lee and Charlotte counties, to the Environmental Studies Center for first-grade manatee education in Martin County, and to Mote Marine in partnership with Booker High School in Sarasota County. ¹⁷

III. Effect of Proposed Changes:

Section 1. Amends s. 370.12 (2), F.S., to:

- Create an exception for violations of manatee protection laws, rules or ordinances for
 persons engaged in activities reasonably necessary to prevent the loss of life or property
 due to weather conditions or other reasonably unforeseen circumstances, or in order to
 render emergency assistance to persons or property,
- Provide a presumption that existing state manatee protection rules shall be adequate and additional rules unnecessary in a region where measurable biological goals established pursuant to s. 372.072 (6), F.S., are being achieved, and
- Establish that the presumption does not prevent the FWC from amending existing rules or adopting new rules to address unique risks or circumstances in a particular area or waterbody.

Section 2. Creates s. 370.1202, F.S., to provide that the FWC shall implement and administer an enhanced manatee protection study designed to increase knowledge of the factors that determine the size and distribution of the manatee populations in state waters, and to use that knowledge to develop science-based policies that provide maximum manatee protection while allowing maximum recreational use of the state's waterways.

As part of the enhanced manatee protection study, the FWC must contract with Mote Marine Laboratory to conduct a "Manatee Habitat and Submerged Aquatic Vegetation Assessment" that considers:

 Manatee populations that congregate in the warm water discharge sites at power plants in the state and the potential risks for disease resulting from increased congregation of manatees at these sites,

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¹⁶ http://www.hsmv.state.fl.us/specialtytags/Manatee.html

¹⁷ Save the Manatee Trust Fund Annual Report 2002-2003, FWC, pg. 5

• Development of research, monitoring, and submerged aquatic vegetation restoration priorities for manatee habitat in and near the warm water discharge sites at power plants in the state, and

• The potential impacts on manatees and manatee habitat if power plants that provide warm water discharge sites where manatees congregate are closed, including how closure will affect the size and health of submerged aquatic vegetation areas.

Mote Marine Laboratory must submit an interim report detailing the progress of the assessment to the Governor, the Legislature, and the FWC by September 1, 2006. No later than January 1, 2007, the final report must be submitted to the Governor, the Legislature, and the FWC, and must contain recommendations for the protection of manatee habitat at warm water discharge sites at power plants in the state.

Provides that the FWC must ensure that funds allocated under this act are expended in a manner consistent with the requirements of the act. Allows the FWC to require an annual audit of the expenditures. If an audit is performed, copies of the audit must be provided to the appropriate substantive and appropriations committees of the Florida Senate and the Florida House of Representatives as the audits become available.

As part of the enhanced manatee protection study, the FWC must conduct a "Signage and Boat Speed Assessment" to:

- Evaluate the effectiveness of manatee protection signs and sign placement, and assess boat speeds,
- Evaluate existing data on manatee mortality before and after existing manatee protection zones were established,
- Evaluate boater compliance and comprehension of regulatory signs and buoys,
- Evaluate changes in boating traffic patterns, and manatee distribution and behavior, and
- Provide recommendations on innovative marker designs that are in compliance with federal aids to navigation system.

The "Signage and Boat Speed Assessment" must address the following:

- The effectiveness of signs and buoys to warn boaters of manatee slow-speed zones with a goal of developing federally approved standards for marking manatee protection zones,
- Determining where buoys may be used in place of pilings for boating safety purposes, and
- An evaluation of higher speed travel corridors in manatee zones to determine the most effective speed to balance safe boating, recreational use, vessel operating characteristics, and manatee protection.

The "Signage and Boat Speed Assessment" must be completed by January 1, 2007, and a findings report must be submitted to the Governor, the President of the Senate, and the Speaker of the Florida House of Representatives by February 1, 2007. The findings report must detail the results of the assessment including specific recommendations for developing state and local policies relating to the appropriate placement of signs, including innovative markers, in manatee slow-speed zones.

The FWC is authorized to develop and implement a genetic tagging program to improve its ability to assess the status and health of the manatee population, including the health and reproductive capacity of manatees. The genetic tagging program may be done in cooperation with federal agencies or other non-commission entities such as genetic laboratories at schools within the state university system.

Section 3. Amends s. 372.072, F.S., to provide that when the FWC evaluates existing and proposed manatee protection rules, the evaluation must describe how the measurable biological goals developed by the FWC in conjunction with the USFWS, were used in the evaluation.

Section 4. Appropriates \$325,000 from the Save the Manatee Trust Fund to the FWC for fiscal year 2004-2005 to contract with Mote Marine Laboratory for the "Manatee Habitat and Submerged Aquatic Vegetation Assessment." Beginning in fiscal year 2004-2005, appropriates \$325,000 from fuel taxes transferred to the Marine Resources Conservation Trust Fund to the FWC to conduct the "Signage and Boat Speed Assessment."

Section 5. Provides that the act shall take effect on July 1, 2004.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. Other Constitutional Issues:

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Mote Marine Laboratory, a nonprofit organization, will receive funding from the FWC to perform the "Manatee Habitat and Submerged Aquatic Vegetation Assessment."

C. Government Sector Impact:

In fiscal year 2002-2003, the FWC's Save the Manatee Trust Fund received \$3.8 million in revenue and spent just under \$4 million, which included some general revenue transferred to the fund to cover the shortfall, on the following:

- Mote Marine Laboratory \$325,000
- Advisory Council on Environmental Education \$133,084
- FWC Division of Law Enforcement \$372,875
- FWC Bureau of Protection Species Management \$1,155,999
- FWC FMRI Manatee Program \$1,682,979

Additional appropriations from the Save the Manatee Trust Fund will require that the FWC realign agency programs funded from the trust fund.

VI.	Technical Deficiencies:
	None.
VII.	Related Issues:
	None.
VIII.	Amendments:
	None.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.

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A bill to be entitled An act relating to manatee protection; amending s. 370.12, F.S.; creating an exception from penalties for activities that are otherwise prohibited if the activity is reasonably necessary in order to prevent loss of life or property or render necessary assistance to persons or property; directing that existing manatee protection rules be presumed adequate and additional rules unnecessary in a region where measurable biological goals are being achieved; providing that the presumption does not prevent the commission from addressing unique manatee issues within that region; defining the term "region" for purposes of the act; creating s. 370.1202, F.S.; requiring the Fish and Wildlife Conservation Commission to implement an enhanced manatee protection study; providing goals for manatee protection research relating to decisions based on sound science-based policies; directing the commission to contract with Mote Marine Laboratory to conduct a "Manatee Habitat and Submerged Aquatic Vegetation Assessment"; providing requirements for the assessment; directing that reports be made to the Governor, Legislature, and commission which include recommendations based upon study results; requiring an annual audit; directing the Fish and Wildlife Conservation Commission to conduct a "Signage and Boat Speed Assessment" of the

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effectiveness of signs warning boaters of manatee slow-speed zones in the waters of this state; providing requirements for the assessment; directing the commission to prepare and submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives; directing the commission to make specific policy recommendations regarding signs in manatee slow-speed zones; amending s. 372.072, F.S.; requiring that measurable biological goals for manatee recovery developed under the Florida Endangered and Threatened Species Act be used by the Fish and Wildlife Conservation Commission when evaluating existing and proposed manatee protection rules; providing appropriations; providing an effective date.

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Be It Enacted by the Legislature of the State of Florida:

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Section 1. Paragraph (s) of subsection (2) of section 370.12, Florida Statutes, is amended and paragraph (u) is added to that subsection to read:

370.12 Marine animals; regulation.--

- (2) PROTECTION OF MANATEES OR SEA COWS. --
- (s) Except as otherwise provided in this paragraph, any person violating the provisions of this subsection or any rule or ordinance adopted pursuant to this subsection shall be guilty of a misdemeanor, punishable as provided in s. 370.021(1)(a) or (b).

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- 1. Any person operating a vessel in excess of a posted speed limit shall be guilty of a civil infraction, punishable as provided in s. 327.73, except as provided in subparagraph 2.
- 2. This paragraph does not apply to persons violating restrictions governing "No Entry" zones or "Motorboat Prohibited" zones, who, if convicted, shall be guilty of a misdemeanor, punishable as provided in s. 370.021(1)(a) or (b), or, if such violation demonstrates blatant or willful action, may be found guilty of harassment as described in paragraph (d).
- 3. A person may engage in any activity otherwise prohibited by this subsection or any rule or ordinance adopted pursuant to this subsection if the activity is reasonably necessary in order to prevent the loss of life or property due to weather conditions or other reasonably unforeseen circumstances, or in order to render emergency assistance to persons or property.
- (u) 1. Existing state manatee protection rules shall be presumed to be adequate and additional rules unnecessary in a region where the measurable biological goals developed pursuant to s. 372.072 are being achieved. However, the presumption does not prevent the commission from amending existing rules or adopting new rules to address unique risks or circumstances in a particular area or waterbody to protect manatees.
- 2. As used in this paragraph, the term "region" means one of the four geographic areas defined by the United States
 Fish and Wildlife Service in the Florida Manatee Recovery
 Plan, 3rd revision (October 30, 2001).

Section 2. Section 370.1202, Florida Statutes, is created to read:

370.1202 Enhanced Manatee Protection Study.--

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CODING: Words stricken are deletions; words underlined are additions.

(1) The Fish and Wildlife Conservation Commission shall implement and administer an enhanced manatee protection study designed to increase knowledge of the factors that determine the size and distribution of the manatee population in the waters of the state. The enhanced study shall be used by the commission in its mission to provide manatees with the maximum protection possible while also allowing maximum recreational use of the state's waterways. The goal of the enhanced study is to collect data that will enable resource managers, state and local policymakers, in consultation with the public, to develop and implement sound science-based policies to improve manatee habitat, establish manatee protection zones, and maximize the size of safe boating areas for recreational use of state waters without endangering the manatee population.

- (2) (a) As part of the enhanced manatee protection study, the Legislature intends that the commission shall contract with Mote Marine Laboratory to conduct a "Manatee Habitat and Submerged Aquatic Vegetation Assessment" that specifically considers:
- 1. Manatee populations that congregate in the warm water discharge sites at power plants in the state and the potential risks for disease resulting from increased congregation of manatees at these sites;
- 2. Development of research, monitoring, and submerged aquatic vegetation restoration priorities for manatee habitat in and near the warm water discharge sites at power plants in the state; and

- 3. The potential impacts on manatees and manatee habitat if power plants that provide warm water discharge sites where manatees congregate are closed, including how closure will affect the size and health of submerged aquatic vegetation areas.
- (b) The Mote Marine Laboratory must submit an interim report on the "Manatee Habitat and Submerged Aquatic Vegetation Assessment" to the Governor, the Legislature, and the commission by September 1, 2006. The interim report must detail the progress of the assessment. The final report, due to the Governor, the Legislature, and the commission by January 1, 2007, must detail the results of the assessment and include recommendations for protection of manatee habitat in warm water discharge sites at power plants in the state.
- (c) The commission shall ensure that funds allocated to implement the "Manatee Habitat and Submerged Aquatic Vegetation Assessment" are expended in a manner that is consistent with the requirements of this subsection. The commission may require an annual audit of the expenditures made by Mote Marine Laboratory. Copies of any audit requested under this subsection must be provided to the appropriate substantive and appropriations committees of the Florida Senate and the Florida House of Representatives as they become available.
- (3) As part of the enhanced manatee protection study, the Legislature intends that the commission must conduct a "Signage and Boat Speed Assessment" to evaluate the effectiveness of manatee protection signs and sign placement, and assess boat speeds. The commission shall evaluate existing data on manatee mortality before and after existing manatee protection zones were established, boater compliance

and comprehension of regulatory signs and buoys, changes in boating traffic patterns, and manatee distribution and behavior. The commission shall also provide recommendations on innovative marker designs that are in compliance with the federal aids to navigation system. The "Signage and Boat Speed Assessment" must address:

- (a) The effectiveness of signs and buoys to warn boaters of manatee slow-speed zones with a goal of developing federally approved standards for marking manatee protection zones,
- (b) Determining where buoys may be used in place of pilings for boating safety purposes, and
- (c) An evaluation of higher speed travel corridors in manatee zones to determine the most effective speed to balance safe boating, recreational use, vessel operating characteristics, and manatee protection,

The commission shall complete its "Signage and Boat Speed Assessment" by January 1, 2007, and must submit a report of its findings to the Governor, the President of the Senate, and the Speaker of the House of Representatives by February 1, 2007. The report must detail the results of the assessment including specific recommendations for developing state and local policies relating to the appropriate placement of signs, including innovative markers, in manatee slow-speed zones.

Section 3. Subsection (6) of Section 372.072, Florida Statutes, is amended to read:

- 372.072 Endangered and Threatened Species Act.--
- (6) MEASURABLE BIOLOGICAL GOALS.--No-later-than
 February-15,-2003,-the-commission,-working-in-conjunction-with
 the-United-States-Fish-and-Wildlife-Service,-shall-develop

measurable-biological-goals---that-define-manatee-recovery. These Measurable biological goals that define manatee recovery developed by the commission, working in conjunction with the United States Fish and Wildlife Service shall be used by the commission in its development of management plans or work plans. In addition to other criteria, these measurable biological goals shall be used by the commission when evaluating existing and proposed protection rules, and in determining progress in achieving manatee recovery. Any evaluation of an existing or proposed protection rule must describe how the measurable biological goals were used in the evaluation.

Section 4. APPROPRIATIONS. --

- (1) For fiscal year 2004-2005, the sum of \$325,000 is appropriated from the Save the Manatee Trust Fund to the Fish and Wildlife Conservation Commission for the purpose of Contracting with Mote Marine Laboratory to conduct the "Manatee Habitat and Submerged Aquatic Vegetation Assessment" as provided in this act.
- (2) Beginning in fiscal year 2004-2005, the sum of \$325,000 is appropriated from funds transferred to the Marine Resources Conservation Trust Fund pursuant to s.

 206.606(1)(d), to the Fish and Wildlife Conservation

 Commission for the purposes of conducting the "Signage and Boat Speed Assessment" as provided in this act.

Section 5. This act shall take effective July 1, 2004.

Amen	dment	t No	

	CHAMBER ACTION <u>Senate</u> <u>House</u>
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6	NATURAL RESOURCES COMMITTEE
7	DATE: 4/16/04
8	TIME: 9:01 AM
9	111VIC
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11	Senator Lawson moved the following amendment:
12	zemeel langua met en ene lelle languamene.
13	Senate Amendment (with title amendment)
14	On page 2, delete everything after the enacting clause
15	
16	and insert:
17	Section 1. Paragraph (s) of subsection (2) of section
18	370.12, Florida Statutes, is amended and paragraph (u) is
19	added to that subsection to read:
20	370.12 Marine animals; regulation
21	(2) PROTECTION OF MANATEES OR SEA COWS
22	(s) Except as otherwise provided in this paragraph,
23	any person violating the provisions of this subsection or any
24	rule or ordinance adopted pursuant to this subsection shall be
25	guilty of a misdemeanor, punishable as provided in s.
26	370.021(1)(a) or (b).
27	1. Any person operating a vessel in excess of a posted
8 2	speed limit shall be guilty of a civil infraction, punishable
29	as provided in s. 327.73, except as provided in subparagraph
30	2.
1	2. This paragraph does not apply to persons violating

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Bill No. PCS for SB 540 Amendment No.

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restrictions governing "No Entry" zones or "Motorboat Prohibited" zones, who, if convicted, shall be guilty of a misdemeanor, punishable as provided in s. 370.021(1)(a) or (b), or, if such violation demonstrates blatant or willful action, may be found guilty of harassment as described in paragraph (d).

- 3. A person may engage in any activity otherwise prohibited by this subsection or any rule or ordinance adopted pursuant to this subsection if the activity is reasonably necessary in order to prevent the loss of human life or a vessel in distress due to weather conditions or other reasonably unforeseen circumstances, or in order to render emergency assistance to persons or a vessel in distress.
- (u) 1. Existing state manatee protection rules shall be presumed to be adequate and additional rules unnecessary in a region where the measurable biological goals developed pursuant to s. 372.072 are being achieved. However, the presumption does not prevent the commission from amending existing rules or adopting new rules to address unique risks or circumstances in a particular area or waterbody to protect manatees.
- 2. As used in this paragraph, the term "region" means one of the four geographic areas defined by the United States Fish and Wildlife Service in the Florida Manatee Recovery Plan, 3rd revision (October 30, 2001).

Section 2. Section 370.1202, Florida Statutes, is created to read:

370.1202 Enhanced Manatee Protection Study. --

(1) The Fish and Wildlife Conservation Commission shall implement and administer an enhanced manatee protection study designed to increase knowledge of the factors that

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Amendment No. ____

determine the size and distribution of the manatee population in the waters of the state. The enhanced study shall be used by the commission in its mission to provide manatees with the maximum protection possible while also allowing maximum recreational use of the state's waterways. The goal of the enhanced study is to collect data that will enable resource managers, state and local policymakers, in consultation with the public, to develop and implement sound science-based policies to improve manatee habitat, establish manatee protection zones, and maximize the size of safe boating areas for recreational use of state waters without endangering the manatee population.

- (2) (a) As part of the enhanced manatee protection study, the Legislature intends that the commission shall contract with Mote Marine Laboratory to conduct a "Manatee Habitat and Submerged Aquatic Vegetation Assessment" that specifically considers:
- 1. Manatee populations that congregate in the warm water discharge sites at power plants in the state and the potential risks for disease resulting from increased congregation of manatees at these sites;
- 2. Development of research, monitoring, and submerged aquatic vegetation restoration priorities for manatee habitat in and near the warm water discharge sites at power plants in the state; and
- 3. The potential impacts on manatees and manatee habitat if power plants that provide warm water discharge sites where manatees congregate are closed, including how closure will affect the size and health of submerged aquatic vegetation areas.
 - (b) The Mote Marine Laboratory must submit an interim

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report on the "Manatee Habitat and Submerged Aquatic

Vegetation Assessment" to the Governor, the Legislature, and
the commission by September 1, 2006. The interim report must
detail the progress of the assessment. The final report, due
to the Governor, the Legislature, and the commission by

January 1, 2007, must detail the results of the assessment and
include recommendations for protection of manatee habitat in
warm water discharge sites at power plants in the state.

- (c) The commission shall ensure that funds allocated to implement the "Manatee Habitat and Submerged Aquatic Vegetation Assessment" are expended in a manner that is consistent with the requirements of this subsection. The commission may require an annual audit of the expenditures made by Mote Marine Laboratory. Copies of any audit requested under this subsection must be provided to the appropriate substantive and appropriations committees of the Florida Senate and the Florida House of Representatives as they become available.
- (3) As part of the enhanced manatee protection study, the Legislature intends that the commission must conduct a "Signage and Boat Speed Assessment" to evaluate the effectiveness of manatee protection signs and sign placement, and assess boat speeds. The commission shall evaluate existing data on manatee mortality before and after existing manatee protection zones were established, boater compliance and comprehension of regulatory signs and buoys, changes in boating traffic patterns, and manatee distribution and behavior. The commission shall also provide recommendations on innovative marker designs that are in compliance with the federal aids to navigation system. The "Signage and Boat Speed Assessment" must address:

Bill No. PCS for SB 540
Amendment No.

 (a) The effectiveness of signs and buoys to warn boaters of manatee slow-speed zones with a goal of developing federally approved standards for marking manatee protection zones,

- (b) Determining where buoys may be used in place of pilings for boating safety purposes, and
- (c) An evaluation of higher speed travel corridors in manatee zones to determine the most effective speed to balance safe boating, recreational use, vessel operating characteristics, and manatee protection,

The commission shall complete its "Signage and Boat Speed Assessment" by January 1, 2007, and must submit a report of its findings to the Governor, the President of the Senate, and the Speaker of the House of Representatives by February 1, 2007. The report must detail the results of the assessment including specific recommendations for developing state and local policies relating to the appropriate placement of signs, including innovative markers, in manatee slow-speed zones.

(4) The commission is authorized to develop and implement the use of genetic tagging to improve its ability to assess the status and health of the manatee population including the health and reproductive capacity of manatees, estimating annual survival rates through mark recapture studies, determining migration patterns, and determining maternity and paternity. The development and use of genetic tagging may be done in cooperation with federal agencies or other non-commission entities such as genetic laboratories at schools within the state university system.

Section 3. Subsection (6) of Section 372.072, Florida Statutes, is amended to read:

Bill No. PCS for SB 540 Amendment No. ____

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372.072 Endangered and Threatened Species Act.--

(6) MEASURABLE BIOLOGICAL GOALS.--No-later-than February-15,-2003,-the-commission,-working-in-conjunction-with the-United-States-Fish-and-Wildlife-Service,-shall-develop measurable-biological-goals---that-define-manatee-recovery-These Measurable biological goals that define manatee recovery developed by the commission, working in conjunction with the United States Fish and Wildlife Service shall be used by the commission in its development of management plans or work plans. In addition to other criteria, these measurable biological goals shall be used by the commission when evaluating existing and proposed protection rules, and in determining progress in achieving manatee recovery. Any evaluation of an existing or proposed protection rule must describe how the measurable biological goals were used in the evaluation.

Section 4. <u>APPROPRIATIONS.--</u>

- (1) For fiscal year 2004-2005, the sum of \$325,000 is appropriated from the Save the Manatee Trust Fund to the Fish and Wildlife Conservation Commission for the purpose of contracting with Mote Marine Laboratory to conduct the "Manatee Habitat and Submerged Aquatic Vegetation Assessment" as provided in this act.
- (2) Beginning in fiscal year 2004-2005, the sum of \$325,000 is appropriated from funds transferred to the Marine Resources Conservation Trust Fund pursuant to s. 206.606(1)(d), to the Fish and Wildlife Conservation Commission for the purposes of conducting the "Signage and Boat Speed Assessment" as provided in this act.
 - Section 5. This act shall take effective July 1, 2004.

Bill No. PCS for SB 540
Amendment No.

On page 1, line 1 through page 2, line 17 delete those lines

5 and insert:

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A bill to be entitled

An act relating to manatee protection; amending s. 370.12, F.S.; creating an exception from penalties for activities that are otherwise prohibited if the activity is reasonably necessary in order to prevent loss of human life or a vessel in distress or render necessary assistance to persons or a vessel in distress; directing that existing manatee protection rules be presumed adequate and additional rules unnecessary in a region where measurable biological goals are being achieved; providing that the presumption does not prevent the commission from amending existing rules or adopting new rules to address unique risks or circumstances affecting manatees within that region; defining the term "region" for purposes of the act; creating s. 370.1202, F.S.; requiring the Fish and Wildlife Conservation Commission to implement an enhanced manatee protection study; providing goals for manatee protection research relating to decisions based on sound science-based policies; directing the commission to contract with Mote Marine Laboratory to conduct a "Manatee Habitat and

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Bill No. PCS for SB 540 Amendment No. ____

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Submerged Aquatic Vegetation Assessment"; providing requirements for the assessment; directing that reports be made to the Governor, Legislature, and commission which include recommendations based upon study results; requiring an annual audit; directing the Fish and Wildlife Conservation Commission to conduct a "Signage and Boat Speed Assessment" of the effectiveness of signs warning boaters of manatee slow-speed zones in the waters of this state; providing requirements for the assessment; directing the commission to prepare and submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives; directing the commission to make specific policy recommendations regarding signs in manatee slow-speed zones; authorizing the Fish and Wildlife Conservation Commission to develop and implement a genetic tagging program for manatees; amending s. 372.072, F.S.; requiring that measurable biological goals for manatee recovery developed under the Florida Endangered and Threatened Species Act be used by the Fish and Wildlife Conservation Commission when evaluating existing and proposed manatee protection rules; providing appropriations; providing an effective date

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SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL:	SB 1510			
SPONSOR:	Senator Lawso	n.		
SUBJECT:	Water Manage	ment Districts		
DATE:	April 14, 2004	REVISED:		
1. Molloy 2 3	ALYST	STAFF DIRECTOR Kiger	REFERENCE NR	ACTION
4 5 6				

I. Summary:

This bill repeals obsolete provisions requiring the water management districts to submit an initial 5-year work plan for Florida Forever projects meeting specific criteria.

This bill amends s. 373.199, Florida Statutes.

II. Present Situation:

Water Management District Florida Forever Work Plans

In 1999, the Legislature enacted chapter 99-247 to create the Florida Forever Program to protect natural areas through land acquisition, to fund water resource development projects on public lands, to provide for outdoor recreational opportunities, and to encourage the preservation of land through less than fee title acquisitions. The five water management districts which receive Florida Forever funding were directed to develop a 5-year work plan to identify and prioritize projects and provide a schedule of activities and funding needed to implement and complete those projects.

The initial 5-year work plan was due on June 1, 2001 and was required to be submitted to the President of the Senate, the Speaker of the Florida House of Representatives, and the Secretary of Environmental Protection. By January 1 of each year thereafter, each district is required to report on acquisitions completed during the year, including modifications or additions to the 5-year work plan.

III. Effect of Proposed Changes:

Section 1. Amends subsection (7) of s. 373.199, F.S., to repeal provisions requiring the water management districts to submit the initial 5-year Florida Forever work plan by June 1, 2001.

Section 2. Provides that t	he act shall tal	ke effect upon i	becoming a 1	law.
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A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. Other Constitutional Issues:

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

- B. Private Sector Impact:
- C. Government Sector Impact:

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Amendments:

None.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.

<u>House</u>

Bill No. <u>SB 1510</u> Amendment No. ____



CHAMBER ACTION <u>Senate</u>

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11	Senator Lawson moved the following amendment:
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13	Senate Amendment (with title amendment)
14	On page 2, between lines 5 and 6,
15	
16	insert:
17	Section 2. Notwithstanding the provisions of paragraph
18	(d) of s. 373.036(1), amendments to the water resource
19	implementation rule contained in chapter 62-40, Florida
20	Administrative Code, shall not become effective until the
21	conclusion of the 2005 regular session of the Legislature.
22	
23	(Redesignate subsequent sections.)
24	
25	
26	======= T I T L E A M E N D M E N T =========
27	And the title is amended as follows:
28	On page 1, line 5, after the semicolon
29	ingent
30	insert:
31	providing that notwithstanding the provisions

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of s. 373.036(1)(d), F.S.; proposed amendments to the water resource implementation rule contained in chapter 62-40 of the Florida Administrative Code may not take effect until the conclusion of the 2005 Regular Session of the Legislature;

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s1510.nr06.03

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL:	SB 1518			
SPONSOR:	Senator Lawson	n		
SUBJECT:	Beaches & Sho	ores/DEP		
DATE:	April 14, 2004	REVISED:		
ANA 1. Branning 2. 3. 4. 5. 6.	ALYST	STAFF DIRECTOR Kiger WS	REFERENCE	ACTION

I. Summary:

This bill deletes an obsolete reference to the Division of Beaches and Shores within the Department of Environmental Protection.

This bill amends s. 403.8163, F.S.

II. Present Situation:

Section 20.255, F.S., provides for the creation of the Department of Environmental Protection. Subsection (3) of s. 20.255, F.S., specifies the divisions which are established within the department. Those divisions include:

- Division of Administrative Services
- Division of Air Resource Management
- Division of Water Resource Management
- Division of Law Enforcement
- Division of Resource Assessment and Management
- Division of Waste Management
- Division of Recreation and Parks
- Division of State Lands

Section 403.8163, F.S., provides that the Division of Beaches and Shores of the Department of Environmental Protection may determine that spoil material may be placed as compatible sediment into the littoral system of an adjacent sandy beach or coastal barrier dune system for the preservation and protection of such beach or dune system. As provided in s. 20.255, F.S., the Division of Beaches and Shores does not exist as a division in the department.

III. Effect of Proposed Changes:

This bill deletes an obsolete reference to the Division of Beaches and Shores within the Department of Environmental Protection.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Amendments:

None.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.



CHAMBER ACTION

<u> House</u>

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5	NATURAL RECOURSES
6	NATURAL RESOURCES COMMITT
7	DATE: 4/16/04
8	TIME: 10:15 Am
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11	Senator Lawson moved the following amendment:
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13	Senate Amendment (with title amendment)
14	On page 1, delete everything after the enacting clause
15	
16	and insert:
17	Section 1. Section 403.0611, Florida Statutes, is
18	amended to read:
19	403.0611 Alternative methods of regulatory permitting;
20	department duties
21	(1) The Department of Environmental Protection may is
22	directed-to explore alternatives to traditional methods of
23	regulatory permitting and enter into voluntary agreements to
24	implement such alternatives, provided that such alternative
25	methods will not allow a material increase in pollution
26	emissions or discharges and will not interfere with the
27	department's obligations under any delegated or approved
28	federal program. Any agreement entered into pursuant to this
29	section constitutes a final order of the department and is
30	subject to chapter 120. The use of any alternative method may
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(2) Working with industry, business associations, other government agencies, and interested parties, the department may enter into voluntary agreements is-directed to consider specific limited pilot projects to implement test-new compliance measures. These measures may should include, but not be limited to, reducing transaction costs for business and government and providing economic incentives for pollution emissions or discharge reductions. The department shall report to the Legislature prior to implementation of a pilot project initiated pursuant to this section.

(3) Any agreements entered into pursuant to this section prior to April 15, 2004, are ratified and remain in effect.

Section 2. This act shall take effect upon becoming a law.

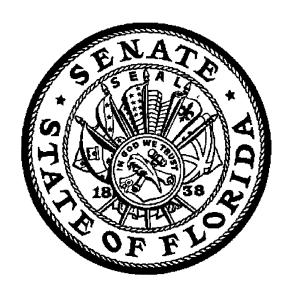
On page 1, delete everything before the enacting clause

22 and insert:

A bill to be entitled
An act relating to the environmental
permitting; amending s. 403.0611, F.S.;
providing that the Department of Environmental
Protection may enter into voluntary agreements
to implement alternative methods of regulatory
permitting; ratifying certain agreements;
providing an effective date.

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Senate Committee On NATURAL RESOURCES

Alfred "Al" Lawson, Jr., Chair Paula Dockery, Vice Chair

AMENDMENT PACKAGE

Monday, April 19, 2004 11:30 a.m. – 1:30 p.m. 37 SOB

(Please bring this packet to the committee meeting. Duplicate materials will not be available.)

BIII	No.	SB	151	8
Amend	dment	. No) .	



CHAMBER ACTION

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NATURAL RESOURCES OCCUPANT

NATURAL RESOURCES COMMITTEE

TIME: 4/19/04

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Senators Lawson and Argenziano moved the following substitute for amendment (353160):

Senate Amendment (with title amendment)

On page 1, delete everything after the enacting clause

and insert:

Section 1. Subsections (4) through (40) of section 403.061, F.S., are redesignated as subsections (5) through (41) respectively, and a new subsection (4) is added to that section to read:

403.061 Department; powers and duties.--The department shall have the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it and, for this purpose, it is authorized to:

(4) Cooperate with the Department of Agriculture and Consumer Services in the implementation of best management practices consistent with ss. 373.4595, 403.067, 576.045 and 597.004.

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Bill No. <u>SB 1518</u>
Amendment No.



The department shall implement such programs in conjunction with its other powers and duties and shall place special emphasis on reducing and eliminating contamination that presents a threat to humans, animals or plants, or to the environment.

Section 2. Section 403.0613, Florida Statutes, is created to read:

403.0613 Voluntary incentive-based alternatives to meet water quality standards.--

- voluntary agreements with industry, business associations, other government agencies, and interested parties to address water resource issues throughout a watershed or basin. Such agreements may implement voluntary, incentive-based alternatives to traditional permitting and regulation to meet the objectives of this chapter, including water quality standards. Any agreement entered into pursuant to this section constitutes an order of the department and is subject to chapter 120. Implementation of such agreements shall not interfere with the department's obligations under any delegated or approved federal program but may be used in conjunction with any of these federal programs.
- (2) The department shall post any agreement under this section on its internet site, and shall make any public record generated under such agreement, including water quality monitoring data, available to the public upon request.
- (3) Any agreements entered into prior to the effective date of this act, including but not limited to, the Suwannee River Basin Partnership Agreement of January 1999 and any subsequent dairy Administrative Agreements are hereby authorized by ss. 403.061 and 403.0611, and are hereby

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ratified.

and insert:

Section 3. This act shall take effect upon becoming a law.

======= T I T L E A M E N D M E N T ==========

A bill to be entitled

An act relating to the environment, amending s.

Environmental Protection to cooperate with the Department of Agriculture and Consumer Services

403.061, F.S.; authorizing the Department of

in the implementation of best management

authorizing the Department of Environmental

Protection to enter into voluntary agreements

with certain entities to address water resource

practices; creating s. 403.0613, F.S.;

issues throughout a watershed or basin;

providing that agreements may implement

voluntary, incentive-based alternatives to traditional permitting; providing that such

and are subject to ch. 120, F.S.; providing

the department's obligations under any

delegated or approved federal program;

requiring the department to post certain

agreements constitute orders of the department

that such agreements shall not interfere with

On page 1, delete everything before the enacting clause

And the title is amended as follows:

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information on its internet site; providing

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